CLAIMS:

1. A compound objective lens comprising a first lens element and a second lens element, the first element comprising a mirror surface for internally redirecting a radiation beam passing through the first element, wherein the objective lens has a numerical aperture greater than 0.65, and wherein the focal length F_1 of the first element is related to the focal length F of the objective lens by the relation:

$$\frac{F_1}{F} > 2.5$$

2. A compound objective lens according to claim 1, wherein the mirror surface is a planar mirror surface.

3. A compound objective lens according to claim 1 or 2, wherein the focal length F of the objective lens is less than 1mm.

4. A compound objective lens according to any of claims 1 to 3, wherein:

$$\frac{F_1}{F} < 4$$

5. A compound objective lens according to any preceding claim, wherein the first element comprises a first lens surface arranged along a first optical axis and a second lens surface arranged along a second optical axis which is substantially orthogonal to the first optical axis, and wherein the first and second optical axes coincide at a point along the mirror surface.

6. A compound objective lens according to claim 5, wherein:

$$d_1 > sag_1 + D_1$$

where d_1 is the distance between the vertex of the first lens surface and the point at which the two optical axes coincide, and sag_1 is the sag of the first lens surface at the entrance pupil D_1.

7. A compound objective lens according to claim 5 or 6, wherein:

$$d_2 > D_1 + sag_2 - \frac{NA_1}{\sqrt{n_1^2 - NA_1^2}}[d_1 - D_2 - sag_1]$$

where d_2 is the distance between the vertex of the second lens surface and the point at which the two optical axes coincide, sag_1 is the sag of the first lens surface at the entrance pupil D_1, NA_1 is the numerical aperture of the beam in the first element, n_1 is the refractive index of the first element, D_2 is a radius on the second surface corresponding to the exit point on the second surface of a collimated ray incident upon the first surface at the entrance pupil D_1, and sag_2 is the corresponding sag of the second surface at radius D_2.

8. An optical scanning device comprising an objective lens according to any of claims 1 to 7, the scanning device comprising a radiation source for generating a radiation beam which is passed through the objective lens to scan an optical record carrier.

9. An optical scanning device according to claim 8 and including a compound objective lens according to any of claims 5 to 7, wherein:

$$d_3 < d_4$$

where d_3 is the shortest distance between the closest point of the first lens surface and the location of the record carrier, measured parallel to the first optical axis, and d_4 is the furthest distance between the second lens surface and the location of the record carrier, measured parallel to the second optical axis.